

## Calendar

**Tue., March 27**

**3:30 p.m.** DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over

**4:00 p.m.** Accelerator Physics and Technology Seminar - 1 West

Speaker: M. DiCastro, CERN  
Title: Measurements and Data Analysis in LHC Superconducting Magnets

**Wed., March 28**

THERE WILL BE NO Fermilab ILC R&D Meeting THIS WEEK

**3:30 p.m.** DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over

**4:00 p.m.** Fermilab Colloquium - 1 West  
Speaker: C. Tan, Brown University

Title: Diffractive Scattering and Gauge/String Duality

[Click here](#) for NALCAL, a weekly calendar with links to additional information.

## Weather

 Showers 71°/45°

## [Extended Forecast](#)

## [Weather at Fermilab](#)

## Current Security Status

[Secon Level 3](#)

## Wilson Hall Cafe

**Tuesday, March 27**

- Tomato bisque
- Lemon pepper club
- Burgundy beef tips
- Smart cuisine: stuffed manicotti
- Grilled chicken Caesar wrap
- Assorted sliced pizza
- Rio Grande taco salad

[Wilson Hall Cafe Menu](#)

## Feature

### Hard-driving users bring in GEM detector for beam test



University of Texas student Jacob Smith (left) and his advisor Jae Yu assemble the GEM chamber in the Meson Test Beam Facility.

A team of Fermilab users from the University of Texas at Arlington, Louisiana Tech University and Changwon National University in South Korea drove their 30 cm-by-30 cm Gas Electron Multiplier chamber prototype all the way from Texas last week to test it in the ILC detector prototype at the Meson Test Beam Facility. "The setup in the test facility is great," said Jae Yu of the University of Texas at Arlington, the lead institution for this study. "It will be a very interesting run."

The GEM is a particle detector technology that the team is proposing for the digital hadron calorimeter in the ILC Silicon Detector and other ILC detector concepts. Physicists find the technology appealing because GEM-based detectors can provide large gain and handle high rates with high efficiency. These detectors are robust and can track charged particles accurately -- an essential ingredient for an ILC digital hadron calorimeter.

A member of the [CALICE](#) collaboration, the Texas team will measure the prototype's responses, efficiencies, cross-talk, occupancy rate and signal read-out rate capabilities. Using a movable table, the team will test different areas of the chamber in the beam. "This allows us to measure properties of the chamber in different areas without interference to beam operations," Yu said. "It is a big deal for large detectors to make sure that all of the parts work consistently, and this test will teach us an incredible amount."

## Director's Corner

### A small step

At Fermilab we treasure many traditions that remind us of the early days of the laboratory. The prairie restoration, the art series, the buffalo herd, the can-do spirit alive ever since Wilson's days are all marvelous and enduring characteristics of the laboratory. Other traditions may be quaint but are anachronistic for this first decade of the 21st century. One such historic artifact is the paper "time and leave sheets" that all Fermilab employees fill out once a week or once a month to report attendance and/or absence from the lab.



Pier Oddone

Most large-scale institutions switched to electronic reporting of time and allocation of effort years ago. In our efforts to modernize the Fermilab business systems, we will phase in a web-based system starting in July. The new system will allow you to enter time and allocate effort online, whether you are working on site, at CERN or any other place. I am writing about this change early to enlist your cooperation for a smooth transition and to inform you that this change is coming.

In a couple of months, we will begin to train all employees on how to use the new system to report time and allocate effort among budget categories, and we will train supervisors on how to approve these reports. The new system requires both weekly and monthly employees to enter data at least once a week. Once familiar with the system, it should be much less hassle than the old time sheets. *Fermilab Today* will provide more information as we move closer to phasing in the new system.

This is not the first time that we have made a major switch in the way we do business. In 2003, Business Services modernized our project accounting system and switched from old-time budget codes to project and task numbers. The new system has greatly streamlined the task of collecting data and keeping track of expenditures and has been

**Chez Leon****Wednesday, March 28  
Lunch**

- Stuffed fillet of sole
- Green rice
- Steamed asparagus
- Apple raisin turnovers

**Thursday, March 29  
Dinner**

- Clam chowder
- Filet mignon
- Vegetable of season
- Potato dauphinois
- Chocolate soufflé w/frangelico cream anglais

[Chez Leon Menu](#)

Call x4598 to make your reservation.

**Archives**[Fermilab Today](#)[Result of the Week](#)[Safety Tip of the Week](#)[ILC NewsLine](#)**Info**

Fermilab Today is online at:  
[www.fnal.gov/today/](http://www.fnal.gov/today/)

Send comments and suggestions to:  
[today@fnal.gov](mailto:today@fnal.gov)

The GEM prototype test is the first in a series of beam tests that the Texas team has planned, in addition to a prototype that could have medical applications. Next, the team will conduct a large scale electronics test (called the Slice Test), to be run jointly with Argonne National Laboratory's Resistive Plate Chamber detector group and other teams. Plans for building a larger prototype will depend on funding, but the current small prototype will allow physicists to see how it reacts in an actual beam. An ILC detector digital hadron calorimeter would require ultimately 4,000 square meters of GEM foil -- approximately 45,000 times larger than the team's prototype. "This beam test is a baby step toward getting the actual ILC detector built," Yu said.

--Elizabeth Clements  
Communication Director, ILC Americas

**In memoriam****John Santic**

Fermilab employee John Santic, age 51, passed away suddenly on Saturday, March 24. Friends may call at the Burns-Kish Funeral Home, 8415 Calumet Ave., Munster, Ind., on Wednesday, March 28, from 4:00 to 8:00 p.m. Funeral services will be held Thursday, March 29, at 9:15 a.m. at the funeral home followed by a mass. More information is [here](#). *Fermilab Today* will provide more information on John and his work at Fermilab in tomorrow's issue.

**Readers Write****Dear FT:**

I was thrilled to read in *Fermilab Today* [yesterday](#) that there is going to be a recycling effort for cans and bottles. As a docent with the Education Office, I know that we often get comments from visiting students as to why we don't recycle. Now we have a better answer for them.

Thank you,  
--Sue Dumford

**In the News**

very helpful in the way we manage projects.

The new system to report time and allocate effort will eliminate the numerous "home-spun" systems that various groups at the lab have developed to keep track of the time that people spend on various projects and programs. It is a small but important step in our ongoing efforts to streamline operations and enhance the laboratory's ability to operate seamlessly no matter where our employees may happen to be working.

**Accelerator Update****March 23 - 26**

- Four stores provided 59 hours and 17 minutes of luminosity
- Recycler suffered from transverse cooling problems
- Preaccelerator 750 KeV area buncher trips
- MTest began running 8 GeV beam
- Store 5297 quenched
- Recycler conducts electron cooling alignment
- MI and Booster suffer many trips due to high temperature in Booster LLRF room

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

**Photo of the Day**

Greg Vogel of AD snapped this photo of the prairie burn yesterday as seen from C0. Despite the recent rain, the prairie dried up enough to allow controlled burns yesterday and last week.

**Announcements**

## From the *Chicago Sun-Times*, March 23, 2007:

### Star 'blown up' by U. of C. team

*Will it show us what makes the universe expand?*

As bright orange and red flames engulf a star in outer space, it looks like something out of the movie "Star Wars."

But it's in fact a complicated research project unveiled Thursday by researchers at the University of Chicago. Instead of blowing up the Death Star, these scientists "blew up" a so-called White Dwarf Star -- on a computer -- to help learn more about a mysterious force known as "dark energy."

[Read more](#)

### EAP office closures

The onsite Employee Assistance Program office will be closed Wednesday, March 28 and Friday, March 30. As always, EAP is available 24 hours a day, seven days a week by calling 1-800-843-1327 or by visiting the [EAP website](#). Find more information [here](#).

### Scottish Country Dancing

Scottish Country Dancing will meet Tuesday, March 27, at Kuhn Barn on the Fermilab site. Instruction begins at 7:30 p.m. and newcomers are always welcome. Most dances are fully taught and walked through, and you do not need to come with a partner. Info at 630-840-8194 or 630-584-0825 or [folkdance@fnal.gov](mailto:folkdance@fnal.gov).

### International Folk Dancing

International Folk Dancing will meet Thursday, March 29, at Kuhn Barn on the Fermilab site. Dancing begins at 7:30 p.m. with teaching and children's dances earlier in the evening and request dancing later on. Newcomers are welcome and you do not need to come with a partner. Info at 630-584-0825 or 630-840-8194 or [folkdance@fnal.gov](mailto:folkdance@fnal.gov).

### [Upcoming Activities](#)